

THE E-FINANCE LAB IS AN INDUSTRY-ACADEMIC PARTNERSHIP BETWEEN FRANKFURT AND DARMSTADT UNIVERSITIES AND PARTNERS ACCENTURE, BEAUFORT, G_POINT, DEUTSCHE BANK, DEUTSCHE POSTBANK, FINANZ_IT, IBM, MICROSOFT, SIEMENS, T-SYSTEMS, DAB BANK, AND IS.TELEDATA LOCATED AT J. W. GOETHE UNIVERSITY, FRANKFURT AM MAIN.

EFL quarterly 02|2005

AN E-FINANCE LAB PUBLICATION

- > TU Darmstadt: Nutzung institutioneller Freiräume durch Kooperation
- > Channel Usage Behavior of German Retail Banking Customers
- > Management of Service-oriented Architectures (SoA)
- > Industrialisierung der Finanzdienstleistungen

provided by Hochschulschicht



JOHANN WOLFGANG GOETHE
UNIVERSITÄT
FRANKFURT AM MAIN



TECHNISCHE
UNIVERSITÄT
DARMSTADT

accenture

Beaufort



Deutsche Bank



Postbank

FINANZ_IT



Microsoft

SIEMENS

T-SYSTEMS

DAB bank

IS Teledata

similar papers at core.ac.uk

IMPRESSUM

Redaktion

Prof. Dr. Wolfgang König
Vorstandsvorsitzender des E-Finance Lab
Frankfurt am Main e. V.

Herausgeber

Prof. Dr. Wolfgang König

Kontakt

info@efinancelab.com
www.efinancelab.com

Gestaltung

Novensis Media GmbH & Co. KG
Bad Homburg

2. Ausgabe, 2005

Copyright © by E-Finance Lab Frankfurt am Main e. V.

Printed in Germany

Nutzung institutioneller Freiräume durch Kooperationen – die Technische Universität Darmstadt auf dem Weg zu Selbständigkeit und Eigenverantwortung und das Beispiel des E-Finance Lab

Es herrscht Morgendämmerung in der Hochschullandschaft: Man kann es auch Aufbruch, Paradigmenwechsel oder schlicht Veränderungs-wille nennen. Im Zentrum steht die Akzeptanz von Wettbewerb. Und der führt zu Konsequenzen: So ist die lang gepflegte Tradition der Trennung von Grundlagenforschung, angewandter Forschung und Entwicklung eigentlich überholt – zumindest gilt dies für die Technischen Universitäten. Seit von Humboldt die Einheit von Forschung und Lehre als zentrales Element der Universität definiert hat, muss Forschung das konstituierende Element universitärer Studiengänge sein. Dieser Gedanke, der in der Zeit der Massenuniversität häufig an die Seite gedrückt wurde, bedarf zur Sicherung der Innovation neuer Unterstützung. Darüber hinaus ist ein Umden-

ken bei der Entwicklung von Studiengängen nötig: Statt sich auf die Stunden des Curriculums zu konzentrieren, müssen die angestrebten Qualifikationen der Absolventen („Outcome“) im Zentrum der Überlegungen stehen.

Mit der Einführung gestufter Studiengänge kann diesen Veränderungen und dem Überwinden von Barrieren Rechnung getragen werden. Eine analoge Entwicklung ist bei grundständigen Studienangeboten und Weiterbildung zu beobachten. Auch hier sind die Grenzen zwischen beiden „Säulen“ längst fließend oder gar vollends gefallen. Der zunehmend verbreitete Einsatz von Multimedia in Forschung und Lehre bestätigt und unterstützt diese Veränderungsprozesse in bisher ungeahnter Geschwindigkeit.



Prof. Dr. Johann-Dietrich Wörner
Präsident der Technischen Universität Darmstadt

Ein gutes Beispiel der Chancen, die sich hier bieten, zeigt das E-Finance Lab, das durch seine Verbindung von Forschung und Lehre über die modernen Medien besonders wichtige Beiträge – gerade in der jetzigen Wettbewerbsdiskussion – liefert:

Die Kooperation der beiden südhessischen Universitäten in Frankfurt und Darmstadt ist durch die unterschiedlichen Kompetenzen offensichtlich ein besonderer Anziehungspunkt auch für die Wirtschaft. Das Beispiel zeigt, dass sinnvolle strukturierte Zusammenarbeit für alle Beteiligten einen Zusatzwert unter besonderer Berücksichtigung institutioneller Profile bedeuten kann. Für die optimale Entwicklung derartiger Kooperationen bedarf es aber auch der institutionellen Freiräume. Und es ist dringend zu wünschen, dass diese erweitert werden. Mit dem „TUD-Gesetz“ hat die hessische Landesregierung einen wichtigen Schritt getan, um die Verselbstständigung einer öffentlichen Universität voran zu bringen: Eigenverantwortung für Personalentscheidungen und Liegenschaften, Recht auf Einführung und Abschaffung von Studienangeboten, aber eben auch das Recht auf Gründung von Unternehmen – das alles sind Punkte, die es

den Hochschulen – trotz unzureichender Finanzierungsbasis – ermöglichen, nachhaltige Beiträge für Innovation zu leisten.

Die TU Darmstadt ist entschlossen, als Modelluniversität eine Pionierrolle zu übernehmen. Gleichwohl ist festzustellen, dass die Diskussion spätestens seit Einführung der gestuften Studiengänge eine weitere Dimension einbezieht: Die seit dem Urteil des Bundesverfassungsgerichts 1972 als Dogma verstandene Betrachtung des Zugangs zum Hochschulsystem, manifestiert durch den Staatsvertrag über die Vergabe von Studienplätzen und die zugehörige Kapazitätsverordnung, passen nicht mehr in die heutige Welt: Die Hochschullandschaft hat sich, insbesondere durch den Ausbau der Fachhochschulen, dramatisch verändert. Seit Mitte der 90er Jahre des 20sten Jahrhunderts ist die Fiktion der harmonisierten Studienlandschaft, beschrieben durch Rahmenordnungen und Abschlussfestlegungen, einem Wettbewerbssystem mit Qualitätsansprüchen gewichen. Unterschiedliche Qualitätsansprüche lassen sich aber mit der traditionellen Sichtweise von bundesweit einheitlichen Studiengängen nicht vereinbaren. Eine Neuinterpretation der „freien Wahl der Ausbildungsstätte“ gemäß Artikel 12 der Verfassung ist dringend geboten.

Mit einem Wort: Zukunftsweisende Impulse wie das E-Finance Lab – qualitativer Einsatz von E-Learning-Medien, die Kooperation Wissenschaft und Wirtschaft und die hochschulübergreifende Kooperation – passen längst nicht mehr in das einfache Schema von Verordnungen. Und das ist gut so.

Paradigmenwechsel

- Von der staatlichen Hochschule in ministerieller Verantwortung (Steuerung)
- zu einer selbstständigen, eigenverantwortlichen Universität mit öffentlichem Auftrag

Paradigmenwechsel, Beispiele:

- Aufhebung der Trennung zwischen Grundlagenforschung, angewandter Forschung und Entwicklung
- Aufhebung der Trennung zwischen grundständigen Studiengängen, Weiterbildung und E-Learning
- Forschung wird ein konstituierendes Element des Studiums (forschendes Lernen)
- Aufhebung der Trennung von Disziplinen als inhaltlich konstituierendes Element
- Verständnis von Verwaltung und Wissenschaft als Partner

Bild 1: Kernpunkte des Paradigmenwechsels

Channel Usage Behavior of German Retail Banking Customers

THE INTERNET USAGE AMONG OFFLINE-CUSTOMERS WILL INCREASE IN THE FUTURE. THE ADDITIONAL CONVENIENCE OFFERED BY THE INTERNET OUTWEIGHS THE HIGHER RISK ASSOCIATED WITH THE INTERNET.

DR. SONJA GENSLER

MARTIN BÖHM

Introduction

Today multi-channel distribution is rather the rule than the exception and provides customers with an expanding menu of options to interact with a retail bank. Due to this development retail banks are becoming aware that managing the customer's channel usage behavior is essential and customer channel migration activities are gaining importance. Such activities aim to manage the customer channel choice behavior and enable retail banks to increase their profitability. Retail banks especially intend to migrate their customers to the Internet channel, because it has been shown that Internet usage has a positive impact on customer profitability.

When aiming to migrate customers to the Internet channel, it has to be considered that a customer's channel usage behavior is influenced by her perceptions of the different channels. Therefore, it is crucial to understand these perceptions in order to develop strategies for customer channel migration. For that reason, we conducted a survey among 500 German retail banking customers. It was the

aim of our study to evaluate customers' channel perceptions in the financial services industry. Furthermore, we elicited the past channel usage behavior and the customers' channel usage intentions. We distinguish between customers who have recently used the Internet channel (so called online-customers) and customers who have not recently used the Internet channel (offline-customers). Thus, we are able to identify differences in channel perceptions between those two groups of retail banking customers. Our results allow deriving strengths and weaknesses of the different channels. Moreover, we are able to identify possible actions to foster customer channel migration.

Factors driving customers' channel perceptions

Based on a literature review and extensive testing the following factors are identified which determine customers' channel perceptions:

- Quality
- Convenience
- Risk

However, customers use the different channels for different purposes. Therefore, we distinguish between (1) information stage, (2) purchase stage and (3) transaction stage. In every stage the channels have to accomplish different functions. For that reason, it seems reasonable to assume that the channels are evaluated differently related to the stages. Yet, in a preliminary study we found out that not all above mentioned factors are relevant for every stage. Therefore, we consider different sets of factors for the different stages (see Figure 1):

The factors were operationalized by multi-item scales that were specifically developed for this study and are tailored to the financial services industry.

Methodology

We conducted a survey among 500 German retail banking customers. The respondents

were interviewed face-to-face and we only considered retail banking customers who actively manage their banking affairs and are between 18 and 70 years of age. Apart from this quote the sample was drawn at random according to Nielsen areas.

Besides demographic variables the respondents were asked which channel they used the last time with regard to the different stages and 4 different product categories (current account, savings account, personal loan and stocks/investment funds). Furthermore, the respondents were asked which channels they intend to use the next time. In addition to the branch and the Internet channel, the banking terminals as well as the call center were considered.

To account for the fact that customers use a mix of channels for certain activities, channel usage intentions were asked on a constant sum scale.

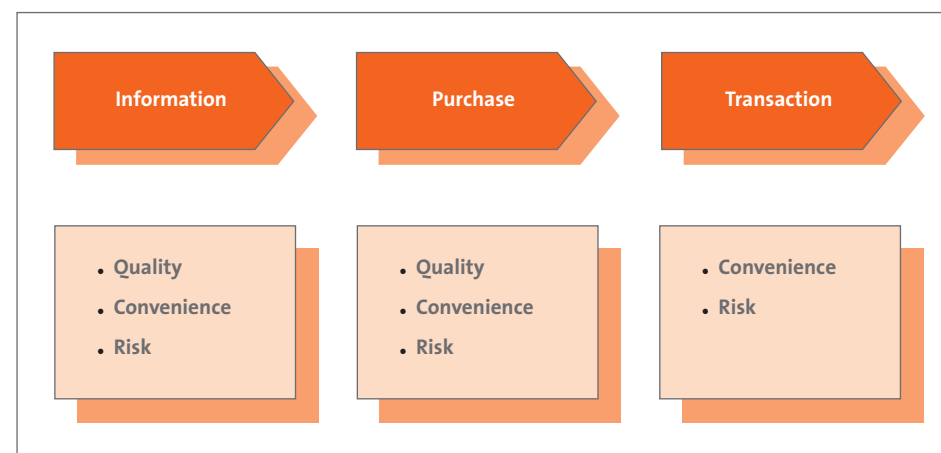


Figure 1: Factors determining customers' channel perceptions

Channel Perceptions

Related to the *information stage* the respondents evaluated the different channels with regard to quality, convenience, and risk.

Relative Channel Evaluation – Information Stage ^{*/**}			
	Quality	Convenience	Risk
Branch	86.0	79.9	29.5
Internet	69.5	76.0	57.8
Call Center	61.8	66.8	55.6
Banking Terminal	58.1	57.7	55.8

It is obvious that overall the branch has the highest perceived quality and convenience as well as the lowest perceived risk. This implies that the branch is still the optimal choice for most of the banking customers in the information stage. This is due to the fact that customers will always choose the channel which offers the highest level of quality and convenience, but at the same time choose the channel which minimizes the risk for the customer. However, in respect to convenience the branch and the Internet channel are more or less comparable.

40.2% of the respondents used the Internet channel the last time they were seeking information on financial products. And it is not surprising that online-customers have an overall higher perception of the Internet channel relative to the branch, whereas offline-customers evaluate the branch better than the Internet channel. Online-customers

perceive the branch and the Internet channel comparable regarding quality and risk, but evaluate the convenience of the Internet channel much higher than the convenience of the branch. However, offline-customers perceive the branch and the Internet channel similar in respect to convenience, but they have a very different perception of the two channels regarding quality and risk.

Considering the *purchase stage* the Internet channel is perceived as the channel with the highest convenience. However, regarding quality and risk the branch again outperforms the other channels.

Relative Channel Evaluation – Purchase Stage ^{*/**}			
	Quality	Convenience	Risk
Branch	86.3	61.3	30.7
Internet	69.7	80.0	59.0
Call Center	62.8	68.3	55.3
Banking Terminal	61.3	72.0	47.5

Today, only 11.4% of the respondents use the Internet channel for purchasing a product which is mainly due to legal restrictions. The online-customers perceive the branch and the Internet channel as comparable regarding the perceived risk. But they especially appreciate the convenience of the Internet channel (Internet: 95.7, branch: 41.7). Surprisingly, the offline-customers as well perceive the Internet channel more convenient than the branch, although they have not used it in the past for purchasing.

In a preliminary study we found out that quality is not a discriminating factor in the *transaction stage*, because customers assume that transactions are conducted with an acceptable quality. Therefore, we only consider convenience and risk for this stage.

Relative Channel Evaluation – Transaction Stage ^{*/**}		
	Convenience	Risk
Branch	67.5	28.8
Internet	77.0	54.6
Call Center	65.9	53.8
Banking Terminal	71.9	44.3

The Internet is still the channel with the highest perceived convenience, whereas the branch dominates the other channels in respect to perceived risk. It might be interesting that the Internet and the call center are considered as similar regarding the perceived risk. Therefore, personal interaction seems not to be a crucial factor to reduce the perceived risk.

38.0% of the respondents can be characterized as online-customers and again online-customers especially appreciate the convenience of the Internet channel, whereas offline-customers report a high risk of the Internet channel.

Conclusion and Summary

The results suggest that there are perceived differences between the different channels. Especially, migrating customers from the branch to the Internet channel might involve quite a lot of effort. So the perceived quality and in particular

the perceived risk has to be influenced.

However, 50.9% of the offline-customers intend to use the Internet channel in the future for information purposes. Furthermore, 42.2% of the offline-customers plan to use the Internet for purchasing financial products and with respect to the transaction stage even 62.0% of the offline-customers plan to use the Internet channel in the future.

Nevertheless, to foster customer channel migration managers should actively influence customers' channel perceptions. Therefore, in a next step the reasons for the high perceived risk of the Internet channel should be investigated and activities should be designed to reduce the perceived risk and to increase the perceived quality of the Internet channel.

Notes:

* All differences are significant at a 5% level with the exception of perceived risk of the call center and the banking terminal.

** All differences are significant at a 5% level.

* Values have been standardized to a 0-100 scale.

Risk:

The lower the perceived risk, the better the evaluation of the channel.

Quality and convenience:

The higher the perceived quality and convenience, the better the evaluation of the channel.

Management of Service-oriented Architectures (SoA)

FINANCIAL INSTITUTIONS NEED FLEXIBLE IT ARCHITECTURES TO REACT APPROPRIATELY TO MARKET DEMANDS. THUS, WE PRESENT AN ARCHITECTURAL APPROACH BASED ON THE CONCEPT OF A SERVICE-ORIENTED ARCHITECTURE (SOA) THAT ENABLES THE MANAGEMENT OF FLEXIBLE BUSINESS PROCESSES BY INTEGRATING LEGACY SYSTEMS.

RAINER BERBNER
RALF STEINMETZ

OLIVER HECKMANN

Introduction

IT architectures within banks and financial institutions are characterised by a large amount of different legacy systems, middleware platforms, programming languages, operating systems and communication mechanisms. This heterogeneity has led to a high complexity that is barely manageable. Traditional EAI (Enterprise Application Integration) solutions have often failed to overcome this heterogeneity. Thus, the IT architectures within financial institutions suffer from a lack of agility and from inefficiency. This means that financial institutions often are not able to match their business requirements onto the underlying IT architecture to react appropriately to market demands.

A Service-oriented Architecture (SoA) aims at overcoming heterogeneity of legacy systems as well as establishing flexible and agile business processes (e.g. [4][5]). However,

the management of business processes based on a SoA is often neglected. Thus, we present a comprehensive approach that enables the management of flexible business processes based on a SoA.

Service-oriented Architecture (SoA)

A Service-oriented Architecture (SoA) is based on services as fundamental elements for developing applications/solutions. Services are self-describing, platform-agnostic computational elements that support rapid, low-cost composition of distributed applications [5]. A SoA is characterised by the loose-coupling of the services involved. This means that services can be replaced by other services at runtime. Services communicate with each other by sending and receiving messages. Furthermore, a SoA supports location transparency. Services should have their definitions and location information stored in a repository and could be accessible by a

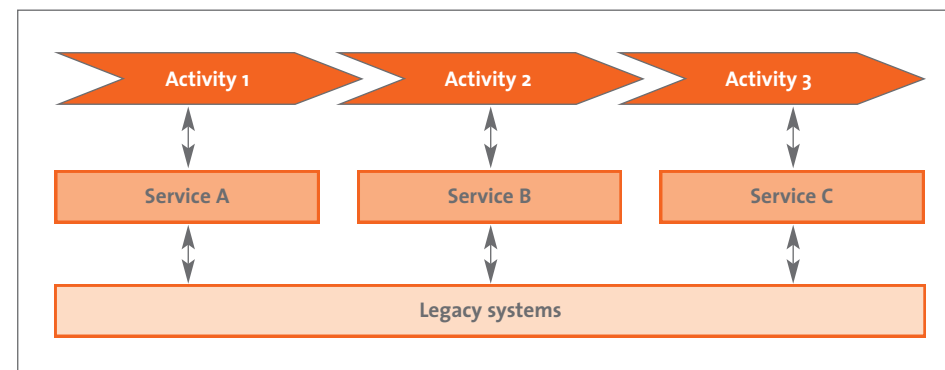


Figure 1: Integration of legacy systems based on a Service-oriented Architecture (SoA) [2]

variety of clients that could locate and invoke the services irrespective of their location.

Cost Savings and Agility

Due to the simplification of the IT landscape, the streamlining of the code base, and technology independence, a SoA can help to reduce the long-term costs of IT [4]. Additionally, future changes can be made more easily and maintenance efforts can be targeted to business functionality. Furthermore, services can be reused in different processes and applications. A SoA is very well suited to support changing business processes, because capabilities (in form of services) can be composed in the most efficient way to achieve a high level of agility. A SoA is not dependent on a certain technology. As a consequence, a SoA decouples the long lifecycle of the IT architecture from the shorter lifecycle of underlying technologies.

Decomposing Business Processes by means of a SoA

To achieve optimal support by a SoA, first business processes have to be conceptually decomposed into activities (so-called process patterns). The decomposition is continued until the process patterns have the optimal granularity which is determined by the business context, the functional handling, as well as the optimal support by the information systems. Figure 1 shows the mapping of conceptually modelled activities (process patterns) onto services. A credit process can be decomposed into the process patterns loan request, credit assessment, servicing and workout. The process pattern credit assessment is decomposed again into the process patterns internal rating, external rating, and decision [2]. The functionality of these process patterns is provided by services.

This architectural approach supports the reusability of process patterns in different busi-

ness processes of a financial institution. Abstract process patterns and their implementations can be stored in repositories. As a consequence, business processes can be composed by combining process patterns out of a construction kit. This approach becomes even more effective if these process patterns can be customised by parameters. This allows additional flexibility and adaptability of business processes. This architectural approach therefore brings together standardisation and individualisation, because the combination of standardised components allows the creation of individualised business processes. Since services are loosely-coupled, this architectural approach allows the integration of services offered by external service providers (Figure 2). As an example, the credit rating of a customer can be provided by an external service provider.

Web Service Technology

Web Service technology can be seen as a realization of the SoA concept. Web Services as an emerging technology based on open XML standards have the potential to overcome integration problems.

A Web Service is defined as a software system identified by a URI, whose public interfaces and bindings are defined and described using XML. Its definition can be discovered by other software systems. These systems may then interact with the Web Service in a manner prescribed by its definition, using XML based messages conveyed by Internet protocols.

WSDL (Web Service Definition Language), SOAP (Simple Object Access Protocol), and UDDI (Universal Description, Discovery and Integration) form the Web Service core standards. WSDL is used as interface definition language, SOAP as communication protocol, and UDDI as a repository to publish and search for particular Web Services. Legacy systems expose their functionality as Web Services. Web Services can be composed to establish business processes without any effects on the underlying legacy systems. As a result enterprises can react much faster to dynamically changing markets and sophisticated customers. Furthermore, cross-organizational business processes can be established by the integration of external Web Services (e.g. external Web Services for credit rating).

Management of a Service-oriented Architecture (SoA)

We present an enhanced Service-oriented Architecture (SoA) realized by Web Services (Figure 3) with comprehensive management support that aims at reliable business processes.

A crucial management issue to establish reliable business processes is the Quality of Service (QoS) of the Web Services involved. Especially if external Web Services are considered. Thus, the decision, which particular Web Service among a group of Web Services with similar functionality (e.g. external credit rating) is invoked, depends on its QoS properties. The main QoS criteria (besides the price

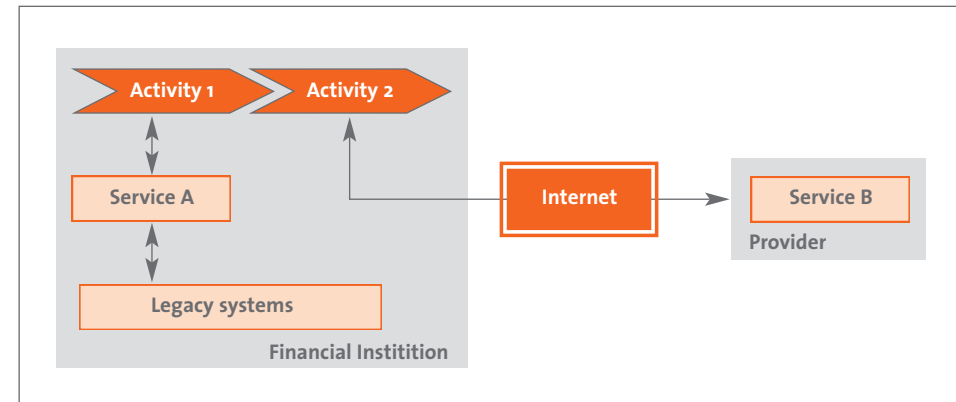


Figure 2: Integration of external Services [2]

of the Web Service) are:

- **Availability:** Availability of a Web Service means the probability that a certain Web Service is available when invoked by a client. A Web Service is considered as available if it is able to respond to a request within a defined time interval.
- **Performance:** Performance as a generic term can be measured by the throughput and the response time. Throughput means the number of requests that can be processed during a defined time slot. The response time is the sum of transmission time and processing time and can be measured as the time required processing a request.
- **Error rate:** The error rate specifies the number of processing errors within a particular time interval.
- **Security:** Security is a comprehensive criterion. Therefore, it is assessed by the sub criteria authenticity, authorisation

(of the participating partners), and data encryption.

- **Reputation:** The reputation of a Web Service and its providers aims at the past experiences with a certain Web Service and its provider. This criterion also considers external references of the provider.

These QoS criteria have to be guaranteed by the particular service provider within a Service Level Agreement (SLA). The SLAs are handled by the SLA Management component. The SLA Management component analyses the SLAs and stores relevant information about guarantees in a database. The evaluation and assessment of the QoS criteria proposed above is performed by the Rating component. The Rating component creates a ranking based on the SLAs. For this, the Rating component evaluates the criteria defined within the SLAs. The non-measurable values like

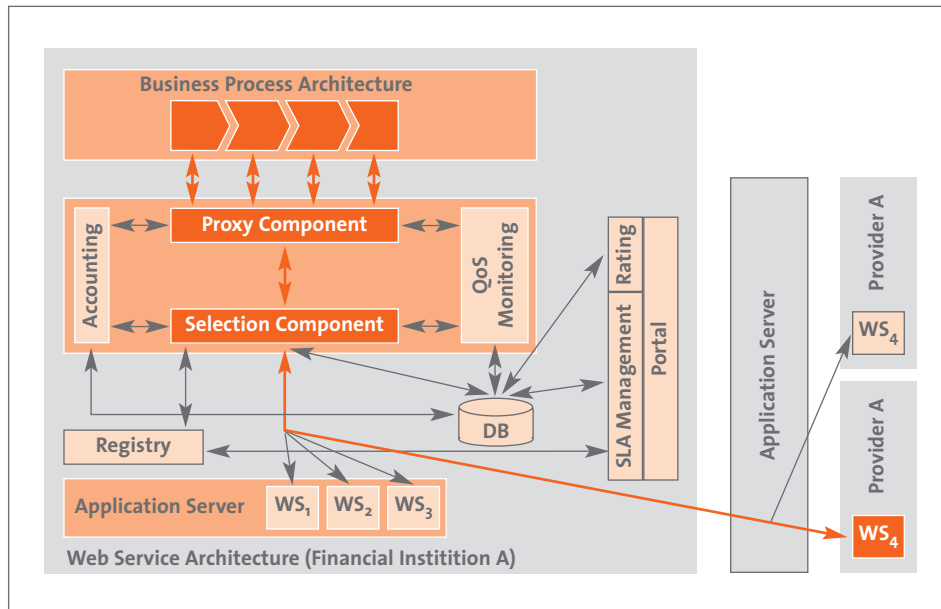


Figure 3: Extended Service-oriented Architecture (SoA) based on Web Services technology [3]

reputation and security have to be assessed by IT experts. Furthermore, IT experts can define rules to exclude Web Services that do not satisfy certain minimal QoS requirements. An example for such a rule can be: "Do not admit Web Services with a response time longer than 10 ms". Web Services passing this stage are integrated by the Rating component in the internal registry. This registry contains links to all Web Services that comply with the defined constraints. These Web Services can be made available by internal business units or external service providers. Internal Web Services are favoured to encapsulate the functionality of legacy systems. The Proxy component and the Selection com-

ponent dynamically invoke Web Services considering QoS attributes of the registered ones. The Proxy component receives the Web Service invocations of the process and forwards them to the Selection component. The Selection component chooses the Web Service with the highest score calculated by the Rating component on basis of the SLAs. Then the Selection component executes the particular Web Service. When a Web Service is invoked by the Selection component, the accounting mechanism is started as well. The Accounting component tracks start and end time of a Web Service invocation as well as potentially occurring errors. Accounting is the process of tracing information systems activi-

ties to a responsible source and is usually conducted by the service provider as a foundation for charging and billing. However, the approach we propose enables accounting at the client side as well. This can be helpful to assign costs to internal business units according to the cause of the costs. Additionally, the service requestor can make use of accounting information to check the provider's invoice. The QoS Monitoring component controls the compliance of the Web Service execution with the SLA. Thus, it evaluates the measurements conducted by the Accounting component. The measurements have to be compared to the guaranteed metrics within the SLA. If there are any violations of the SLA, the provider of the particular Web Service as well as the service requestor are notified. Furthermore the QoS Monitoring component can initiate the substitution of a bad-performing Web Service, whose availability broke down, by another Web Service with the same functionality. For this, a message is sent to the Selection component to terminate the bad-performing Web Service and to start another one.

For further details of our work we refer to [1][2][3][6].

References

Berbner, Rainer; Mauthe, Andreas; Steinmetz, Ralf:

Unterstützung dynamischer E-Finance-Geschäftsprozesse. In: Horster, P. (Hrsg.): Elektronische Geschäftsprozesse 2004. Klagenfurt. Syssec Verlag 2004, S. 44-54. [1]

Berbner, Rainer; Heckmann, Oliver; Steinmetz, Ralf:

An Architecture for a QoS driven composition of Web Service based Workflows. In: Proceedings of the 8th International Conference on Electronic Commerce Research (ICECR-8). Tunis 2005. [2]

Berbner, Rainer; Heckmann, Oliver; Mauthe, Andreas; Steinmetz, Ralf:

Eine Dienstgüte unterstützende Web-Service-Architektur für flexible Geschäftsprozesse. Erscheint in: WIRTSCHAFTSINFORMATIK 47 (2005) 4. [3]

Krafzig, Dirk; Banke, Karl; Slama, Dirk:

Enterprise SOA. Best Practise. Prentice Hall, Upper Saddle River 2005. [4]

Papazoglou, Mike P:

Service-Oriented Computing: Concepts, Characteristics and Directions. In: Proceedings of the 4th International Conference on Web Information Systems Engineering (WISE 2003). Rom 2003, S. 3-12. [5]

Steinmetz, Ralf; Berbner, Rainer; Martinovic, Ivan:

Web Services zur Unterstützung flexibler Geschäftsprozesse in der Finanzwirtschaft. In: Sokolovsky, Z.; Löschenkohl, S. (Hrsg.): Industrialisierung der Finanzwirtschaft. Gabler Wiesbaden 2004. [6]

Industrialisierung von Finanzdienstleistungen

Herr Dr. Hollich, was verstehen Sie unter industriellen Dienstleistungen?

Dr. Hollich: Industrielle Dienstleistungen sind solche, die an und für technische Produkte nachgefragt und angeboten werden. Ein Beispiel ist die Inspektion und ggf. Reparatur eines Kraftfahrzeugs. Ohne diese Services sind die Produkte heutzutage faktisch nicht mehr verkäuflich.

Warum sind es diese Dienstleistungen Wert, näher betrachtet zu werden?

Dr. Hollich: Der Dienstleistungsanteil an Lösungen nimmt ständig zu und hat in entwickelten Volkswirtschaften die Wertschöpfung der klassischen dinglichen Produktion bereits hinter sich gelassen. Frühere Produkthanbieter, die diese Services als „Rucksack“ zu ihren Produktions- und Vertriebsaktivitäten gesehen haben, entwickeln sich mehr und mehr zu Lösungshäusern, die nur noch einen kleinen und zudem sinkenden Materialteil aufweisen.

Wo liegen die Probleme, industrielle Dienstleistungen mit herkömmlichen Produktionsablaufsystemen zu steuern?

Dr. Hollich: Der Versuch, industrielle Dienstleistungen, also Prozesse, einfach so zu strukturieren wie die Produkte – Stichworte sind Stücklisten und Arbeitspläne –, war nur begrenzt erfolgreich. So bedarf es des sog.

externen Faktors, um eine Dienstleistung ausführen zu können – dieses Konzept fehlt in klassischen PPS-Systemen. Ein ärztlicher Prozess ist beispielsweise abhängig vom Zustand des zu behandelnden Patienten. Individualisierung weist also einen hohen Stellenwert auf und wir haben noch kaum Erfahrungen mit der Standardisierung von Prozessen. Insofern sind die durchzuführenden Aktivitäten häufig nicht im Vorhinein spezifizierbar.

Das sind doch nur die Probleme der „Produktionssteuerer“ ...

Dr. Hollich: ... nein, nicht nur. Dadurch, dass eine anerkannte, durchgängige Technologie der Dienstleistungsproduktion fehlt, wird faktisch jeder Service zu einem individuellen Einzelprodukt. Der Kunde kann dann die Leistungen nicht nachprüfen, die Preise sinken nicht in einem Ausmaß, wie man dies bei Industrialisierung erwarten darf, die Prozesse erfolgen häufig langsam und es werden dem Kunden zu viele Eigenleistungen abverlangt. Und auch im B2B gibt es negative Konsequenzen. Z. B. wird das Outsourcing zur Ausnutzung von Spezialisierungsvorteilen behindert.

Gelten die vorgenannten Besonderheiten auch für Finanzdienstleistungen?

Dr. Hollich: Grundsätzlich ja, vielleicht mit

einer kleinen Vereinfachung: Das Ergebnis von Finanzdienstleistungen wird gängigerweise in dem standardisierten Nominalgut „Geld“ ausgedrückt, sodass ansonsten bei Dienstleistungen zu findende Qualitätseinschätzungsprobleme entfallen. Insofern bietet es sich an, am Beispiel von Finanzdienstleistungen neuartige Ablaufplanungskonzepte zu erproben, die dann nach weiteren Erfahrungen auch bei industriellen Dienstleistungen zum Einsatz kommen könnten.

Haben Sie eine Vision, wie die allgemeinen Ablaufplanungs- und -steuerungsprobleme gelöst werden könnten?

Dr. Hollich: Wir müssen die Prozessstrukturierung in den Mittelpunkt stellen und dabei z. B. die Spezifikation von Interdependenzen

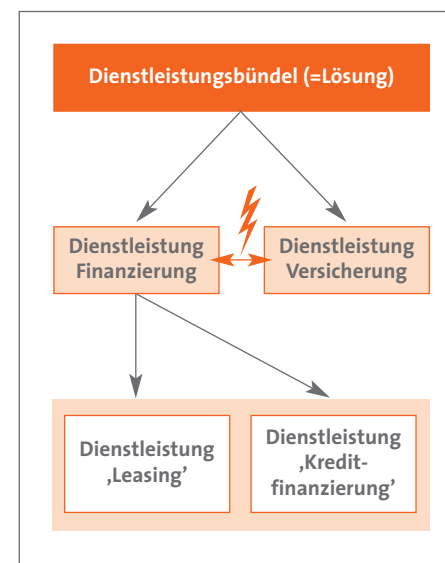


Bild 1: Interdependenzen zwischen Dienstleistungen in der Prozessstrukturierung



Dr. Franz Hollich
SAP Deutschland AG
Business Solution Architects Group

zwischen Dienstleistungen (und damit also zwischen Prozessen) auf der gleichen Strukturierungsebene zulassen – im Gegensatz zur diesbezüglichen Unabhängigkeitsannahme der Komponenten in der Stücklistentechnik.

Ein schönes Beispiel, um dies zu verdeutlichen, ist der finanzierte Kauf und die Absicherung einer Anlage. Die Gesamtdienstleistung als Lösung besteht aus den Teildienstleistungen Finanzierung und Versicherung. Als Finanzierungsalternativen stehen etwa Leasing und Kreditfinanzierung (oder eine Kombination der beiden) zur Verfügung. Die Ausgestaltung der Versicherung ist jedoch nicht unabhängig von der Finanzierungsart. D. h. die Teilkomponenten der Gesamtlösung sind, im Gegensatz zur Strukturierung mittels Stücklisten in der Produktion, nicht unabhängig voneinander (siehe Bild 1).

Kundenmanagement in der Finanzdienstleistungsindustrie

E-FINANCE LAB'S SECOND SPRING CONFERENCE TOOK PLACE AT THE JOHANN WOLFGANG GOETHE – UNIVERSITY IN FRANKFURT

The second spring conference of the E-Finance Lab on the 17th of February 2005 has ended with great success. Customer Management was the core topic of the halfday conference which took place in the ballroom at the Campus Westend of the Johann Wolfgang Goethe-University in Frankfurt. The conference followed the annual meeting of the E-Finance Lab council in Darmstadt at the Lichtenberg Guest House of the Technical University.

Prof. Skiera, who had organised the conference together with the team of cluster III (Customer Management in a Multi-Channel Environment), opened the conference. Prof. König, the chairman of the E-Finance Lab, gave an introductory speech and illustrated the positioning of the E-Finance Lab and the recent success in research on the industrialization in the finance industry.

Dr. Hans Kraus, Head of Customer Management at Deutsche Bank, showed the implementation of a customer management concept for private and business clients from an industry perspective.

Professor Richard Staelin of the renowned Fuqua School of Business (Duke University)

followed with his speech and postulated a critical check-up of existing CRM tools and strategies. He highlighted recent developments in theory. Thomas Ganswindt, member of the board of Siemens AG, pointed out the important role of IT infrastructure for a successful customer management in the future. He gave valuable insights into the holistic strategy of relationship management at the Siemens Group.

The course of lectures was closed by Prof. Skiera, who presented recent research results of cluster III and provided an overview of the problems and specifics of customer management within the financial services industry. He developed a concept of performance metrics for controlling and steering the marketing and IT activities for optimizing the customer value.

About 300 managers from the financial services industry and associated industries attended the conference. They have used the conference and the following get-together to discuss the future trends and the opportunities offered by customer management in the financial services industry.



Presentation of Prof. Staelin in the ballroom of the casino of Johann Wolfgang Goethe – University



Conference Speakers: Prof. Bernd Skiera (E-Finance Lab), Prof. Richard Staelin (Duke University), Mr. Thomas Ganswindt (Siemens), Dr. Hans Kraus (Deutsche Bank), Prof. Wolfgang König (E-Finance Lab) (l. t. r.)

Further information regarding the conference including the presentations are available for download on the E-Finance Lab website at:

<http://www.efinancelab.de/home/events/fruehjahrstagung2005/>.

news



Verleihung des Leadership-Awards: Prof. Dr. Ralf Steinmetz und Hubert Ramcke (v.l.n.r.)

Ralf Steinmetz is Leadership-Award-Winner 2005 of the Economic Forum Deutschland

Prof. Dr.-Ing. Ralf Steinmetz has been distinguished with the National Leadership Award of the Economic Forum Deutschland for his scientific work in the area of Information Technology, IT-Services, and Multimedia. After a nomination process that included the inquiry of more than 600 decision makers of the IT-Branch in Germany, Prof. Dr.-Ing. Ralf Steinmetz was selected to receive the award out of 200 nominees. The awarding ceremony took place on February 17th at the town hall Schöneberg in Berlin. Congratulations!

Meeting of the E-Finance Lab Council

The annual meeting of the E-Finance Lab Council took place at the Lichtenberg Guest House of the Technical University in Darmstadt on February 17th as an opening act to the Spring Conference held in Frankfurt. Mr. Roland Koch, Prime Minister of Hesse, and Mr. Peter Benz, Mayor of Darmstadt, participated in this event, which was organized by members of Cluster 2, headed by Prof. Dr.-Ing Ralf Steinmetz. The industry partners have been impressed by the achievements of the E-Finance Lab especially in the light of its short existence. Particularly the amount of national and international publications and the establishment of international cooperations has received the recognition of the E-Finance Lab Council.

Ankündigung

Kamingespräch „E-Finance“ für Entscheider auf dem Campus Westend zum Thema „Elektronische Rechnung - Potenziale für Unternehmen“ am 21.04.2005 ab 16.30 Uhr, mit Vorträgen von T-Systems, Lufthansa Airplus und Bonpago sowie einer Podiumsdiskussion unter der Moderation von Prof. Dr. Bernd Skiera. Anschließend ist Zeit für Fachgespräche bei einem Glas Wein und Häppchen. Die Teilnahme ist kostenlos.

Weitere Informationen unter www.bieg-hessen.de oder pfaff@wiwi.uni-frankfurt.de.

selected efinance lab publications

BERBNER, R.; HECKMANN, O.; STEINMETZ, R.:

An Architecture for a QoS driven composition of Web Service based Workflows.

In: Proceedings of the 8th International Conference on Electronic Commerce Research (ICECR-8), Tunis, Tunisia, 2005 (forthcoming).

HACKETHAL, A.:

Jusqu'où l'Outsourcing

In: Blommestein et al. (Hrsg.): Prolegomènes d'une nouvelle économie bancaire, Economica, 2005.

HACKETHAL, A.; SCHMIDT, R.H.:

Différences internationales dans les structures de financement des entreprises

In: Blommestein et al. (Hrsg.): Prolegomènes d'une nouvelle économie bancaire, Economica, 2005.

HOLZHÄUSER, M.; LAMMERS, M.; SCHWARZE, F.:

Integrated Decision Model for Credit Product Outsourcing

In: WIRTSCHAFTSINFORMATIK, 47, 2005.

TURCZYK, L.:

Information Lifecycle Management als Weg aus dem Speicherdilemma

In: Information Wissenschaft & Praxis, 7, 2004.

For a comprehensive list of all E-Finance Lab publications see www.efinancelab.de/pubs/pubs.php

electronic newsletter

Das E-Finance Lab betreibt zwei Typen von Newslettern, die beide quartalsweise erscheinen, sodass alle sechs Wochen die jeweils andere Art herauskommt. Bei dem hier vorliegenden gedruckten Newsletter steht die Beschreibung der Ergebnisse zweier Forschungsprojekte des E-Finance Lab im Zentrum – ergänzt durch ein Interview und weitere Kurzinformationen (zur Subskription senden Sie bitte eine E-Mail an: eflquarterly@efinancelab.com oder ihre Visitenkarte mit der Notiz „bitte gedruckten newsletter zusenden“ an:

Prof. Dr. Wolfgang König

E-Finance Lab, Universität Frankfurt
Mertonstr. 17, 60054 Frankfurt).

Der elektronische Newsletter hingegen setzt mehr auf kurze Anmoderationen und den Einsatz von Hyperlinks zu weiterführenden Ressourcen (zur Subskription senden Sie bitte eine Mail an: newsletter@efinancelab.com).

Viele weitere Informationen zum E-Finance Lab finden Sie unter www.efinancelab.com.

